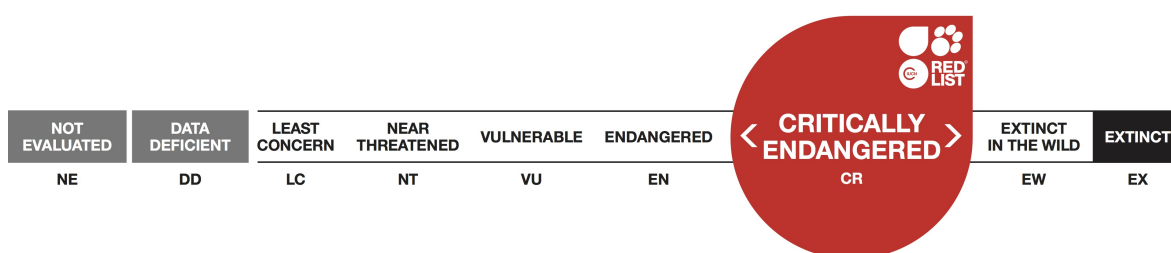


## *Pittosporum* sp. nov. 'veilloniana'

Assessment by: Gemmill, C., Veillon, J.-M., Amice, R., Cazé, H., Dumontet, V., Fleurot, D., Garnier, D., Gâteblé, G. & Maggia, L.



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## Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Magnoliopsida	Rosales	Pittosporaceae

**Taxon Name:** *Pittosporum* sp. nov. 'veilloniana' Gemmill ined.

**Taxonomic Source(s):**

Gemmill, C. In Prep. Three new species of *Pittosporum* in New Caledonia.

## Assessment Information

**Red List Category & Criteria:** Critically Endangered B1ab(ii,iii,v)+2ab(ii,iii,v); D [ver 3.1](#)

**Year Published:** 2017

**Date Assessed:** July 23, 2015

**Justification:**

The new species *Pittosporum* "veilloniana" (NOU 031190) was discovered by Chrissen Gemmill in 2008 near the bottom of Boulinda mountain and in the same vicinity independently by Jérôme Munzinger that same year. A scrubland species found on ultramafic soil at an altitudinal range 300-410 m asl., its extent of occurrence (EOO) and area of occupancy (AOO) are both 8 km<sup>2</sup>. In 2015, a census report (D. Fleurot) of the population found 29 mature individuals. Frequent outbreaks of fire occur at the altitude where *P.* "veilloniana" can be found, as well as mining activities on Boulinda, hence predicting a continuous decline of AOO, quality of habitat and number of individuals. Using criteria B and D, *P.* "veilloniana" qualifies for listing as Critically Endangered (CR) B1ab(ii,iii,v)+2ab(ii,iii,v).

## Geographic Range

**Range Description:**

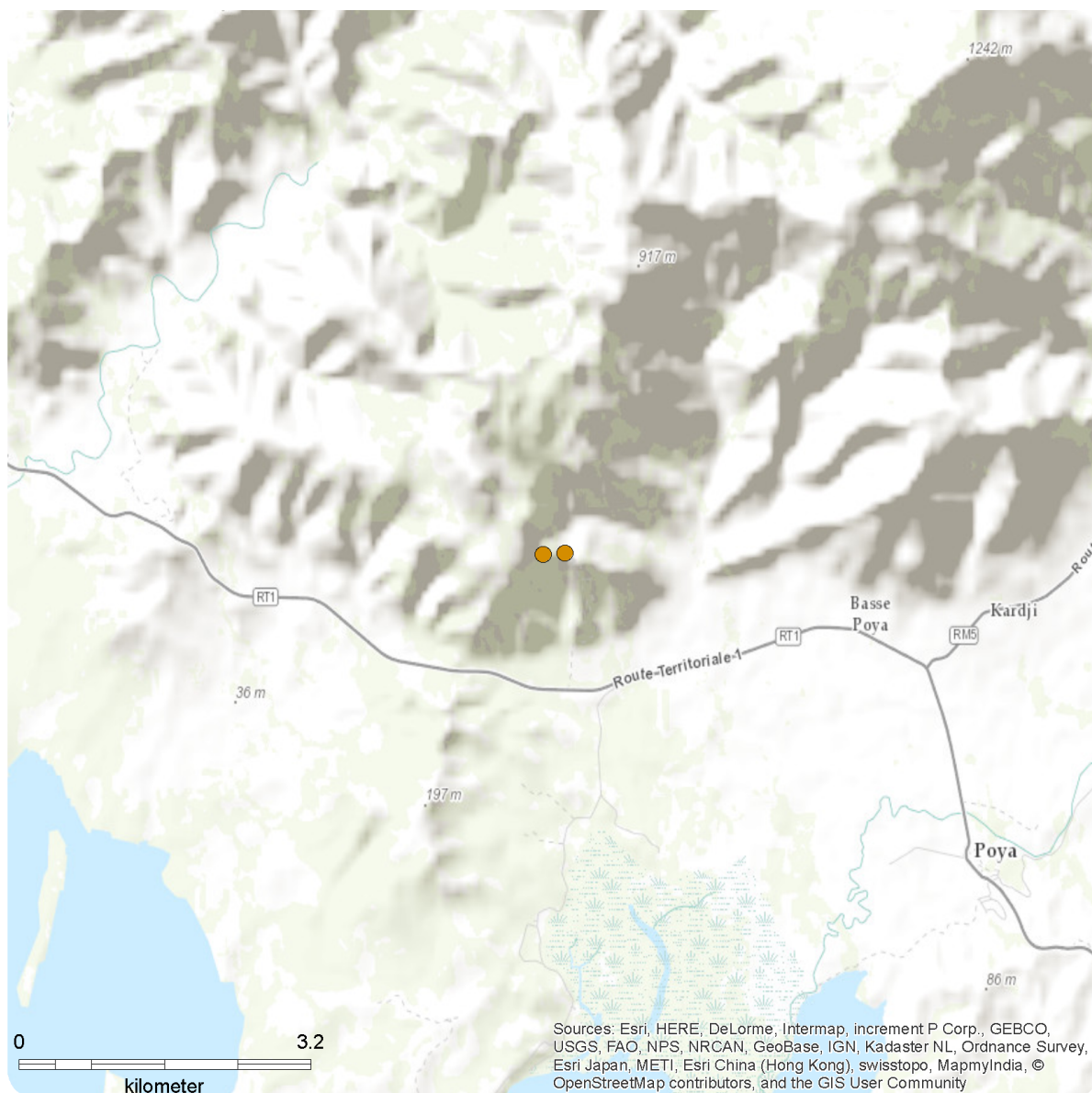
*Pittosporum* "veilloniana" (NOU 031190) is an endemic species of New Caledonia known only from Mine Saint Louis at the bottom of Boulinda mountain.

**Country Occurrence:**

**Native:** New Caledonia

# Distribution Map

*Pittosporum* sp. nov. 'veilloniana'



## Range

● Extant (resident)

Compiled by:

IUCN SSC New Caledonia Plants RLA



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



## Population

A census of the only known population had 29 mature individuals. As this species might be present in other areas, it is difficult to estimate the total number of individuals.

**Current Population Trend:** Decreasing

## Habitat and Ecology (see Appendix for additional information)

New species *Pittosporum* "veilloniana" occurs in shrubland on ultramafic soil found at an altitudinal range 300-410 m asl.

**Systems:** Terrestrial

## Threats (see Appendix for additional information)

*Pittosporum* "veilloniana" was impacted by past mining activities on Boulinda (with a potential re-opening of mine Saint-Louis) and can be also affected by frequent bushfires which sweep across New Caledonia each year. New Caledonia contains between 20 - 30% of the world's nickel resources and has experienced intense mining activities since the late 19th century which has generated soil erosion (1.2% of bare ground mapped by SPOT5 in 2007).

## Conservation Actions (see Appendix for additional information)

At the moment, there are no regulatory laws dedicated to new species in New Caledonia: *Pittosporum* "veilloniana" is thus not protected by legislation. Given the lack of knowledge on this species, it is highly recommended that immediate and exceptional conservation measures be taken. Due to its ecology, it is possible that this species be present elsewhere, and field surveys are urgently needed on Paéoua, Kopéto, including on the slopes.

## Credits

**Assessor(s):** Gemmill, C., Veillon, J.-M., Amice, R., Cazé, H., Dumontet, V., Fleurot, D., Garnier, D., Gâteblé, G. & Maggia, L.

**Reviewer(s):** Tanguy, V.

**Facilitators(s) and Compiler(s):** Chanfreau, S.

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## Citation

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## External Resources

For [Images and External Links to Additional Information](#), please see the Red List website.

# Appendix

## Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Habitat	Season	Suitability	Major Importance?
3. Shrubland -> 3.5. Shrubland - Subtropical/Tropical Dry	-	Suitable	-

## Threats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Threat	Timing	Scope	Severity	Impact Score
3. Energy production & mining -> 3.2. Mining & quarrying	Past, likely to return	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.1. Increase in fire frequency/intensity	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		

## Conservation Actions in Place

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Conservation Actions in Place
In-Place Land/Water Protection and Management
Occur in at least one PA: Yes
Invasive species control or prevention: No
In-Place Species Management
Successfully reintroduced or introduced benignly: No
Subject to ex-situ conservation: No

## Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Research Needed
1. Research -> 1.2. Population size, distribution & trends

## Additional Data Fields

<b>Distribution</b>
Estimated area of occupancy (AOO) (km <sup>2</sup> ): 8
Continuing decline in area of occupancy (AOO): Yes
Extreme fluctuations in area of occupancy (AOO): No
Estimated extent of occurrence (EOO) (km <sup>2</sup> ): 8
Continuing decline in extent of occurrence (EOO): No
Extreme fluctuations in extent of occurrence (EOO): No
Number of Locations: 1
Continuing decline in number of locations: No
Extreme fluctuations in the number of locations: No
Lower elevation limit (m): 300
Upper elevation limit (m): 412
<b>Population</b>
Number of mature individuals: 29-50
Continuing decline of mature individuals: Yes
Extreme fluctuations: No
Population severely fragmented: Unknown
No. of subpopulations: 1
Extreme fluctuations in subpopulations: No
<b>Habitats and Ecology</b>
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 0

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